

NOTES

A NOMENCLATURAL NOTE ON *EUPATORIUM FISTULOSUM* (ASTERACEAE)¹ — *Eupatorium fistulosum* Barratt ranges from "s Me to Iowa, s to c Fla, Ala, Miss, La, and Tex" (Cronquist 1980). Barratt (1841) separated *E. fistulosum* from *E. purpureum* L. He described the former species and few other eupatoriums with whorled leaves in a single folio page publication (fig. 1), titled *Eupatoria verticillata*. Robinson (1904), probably unaware of Barratt's *Eupatorium fistulosum*, described a new *Eupatorium* species from Costa Rica, as *E. fistulosum*. Robinson's *E. fistulosum* is a later homonym and illegitimate, which was corrected by B. Robinson (1931) by renaming his Costa Rican *Eupatorium* sp., as *E. angulare* B. Robins. King and H. Robinson (1970) treated *E. angulare* as a synonym of *Neomirandea angularis* (B. Robins.) King & H. Robins.

Barratt intended to distribute his single folio page publication accompanied with a set of exsiccatae among his friends and botanists. This information is found in figure 1. It is evident from ICBN article 31 (Greuter 1988), that the above procedure, practiced by Barratt in this case, would validate a name if done prior to Jan 1953. We believe that Barratt did distribute his single folio page publication to other botanists. Wood (1847) stated that his treatment of *Eupatorium* was adopted from Barratt's *Eupatoria verticillata*. Jackson (1881) and B. Robinson (1931) cited Barratt's 1841 publication.

The name *E. fistulosum* was attributed to Barratt by several authors such as Mackenzie (1920), Weatherby (1921), Wiegand and Weatherby (1937), Deam (1940), Fernald (1950), Gleason and Cronquist (1963), Steyermark (1963), Radford et al. (1968), King and Robinson [1970; as *Eupatoriadelphus fistulosus* (Barratt) King & H. Robins.], Correll and Johnston (1970), Strausbaugh and Core (1978), Cronquist (1980), Wunderlin (1982; in *Eupatoriadelphus*), and Kartesz (1990). However, Jones and Fuller (1955) attributed the name *E. fistulosum* to Barrett ex Wood, and Soil Conservation Service (1982) attributed the name to Barratt ex Hooker (in *Eupatoriadelphus*). We could not locate any Hooker publication of this name. Since Barratt published this name in 1841, Hooker's usage of this name, if any, cannot be prior to 1841 (hence not in his Fl. Bor. Amer., vol. 2. 1840). Weatherby (1921) mentioned that Hooker, for his Fl. Bor. Amer. publication, invited Barratt to contribute the treatment of

¹Please send reprint requests to Fryxell.

EUPATORIA VERTICILLATA.

SPECIMENS TO ILLUSTRATE THE NORTH AMERICAN
VERTICILLATE SPECIES AND VARIETIES

OF THE

GENUS EUPATORIUM:

With Synonymes and References.

By JOSEPH BARRATT, M. D.

MIDDLETOWN, CONNECTICUT

MAY, 1841.

* A number of uniform sets of Specimens have been preserved for distribution
among Botanical friends and correspondents.

No. 1. *EUPATORIUM FISTULOSUM** Barratt; = *E. purpureum* Willd. sp. pl. 3, p. 1799; (partly; excl. ref. et Syn. except Cornuti (q. v.) Pursh, fl. 2, p. 515; Ell. fl. 2, p. 307; Bigelow, fl. 2d ed. p. 297; Decand. Prodr. 5, p. 151, n. 68, (in part); = *E. maculatum* Linn. sp. pl. 1174, (in part); et Herb. fide Dr. Gray. = *E. purpureum* v. *angustifolium* Torr. & Gray Flor. 2, p. 82.

(*Eupatoria*) foliis Enulae, Cornuti Canad. p. 101. "Caules rubescens
luc cinereo tamen colore suffusi rotundi iocantes intus." Cornuti, (lt.)

The specific character given by Willdenow of *E. purpureum*, applies to our *E. fistulosum*. The full description there taken from L. sp. pl. n. 13 is = *E. verticillatum* W. I. so that Willdenow has here designated two different species. From our observations, however, that several years ago, collected me to study the genus, I saw in the growing state, and saw I am able to send the specimens satisfactorily, all had made a full collection of specimens.

Stems below from the base, to the base; height 5-6 or 7 feet; smooth bluish purple and glaucous; reddish purple beneath; petioles and small leaflets purple. The stem and the root nearly horizontal in New England, and only slightly from the root species, as in the most rare instance I have found it in Upper parts of which, and the small rootlets which grow on uplands, near the hollow stem, and other characteristics. The hollow stem of the species have been and is characteristic for many rocks at the Middletown Prison Quarry. *E. fistulosum* does not appear to possess the root properties of *E. maculatum*. The original *E. purpureum*, Linn. is shown, (see 4) to be a different plant, presenting also several interesting characters, but all retaining the characteristics of that species, and not passing by gradation into other species. The name here given by us, (name a new name was required,) is sufficiently expressive of its nature. The resemblance in system, we have in this group of North American *Eupatorium*, is most extraordinary. It is hoped that these specimens, with the notes and references, will render the study of this group very perfectly satisfactory to the Botanist. Should our European correspondents, from time to time, after comparison with the original *Herbaria* cited, any errors, it will give us pleasure to receive their communications and corrections.

1. *EUPATORIUM FISTULOSUM** Barratt

A small variety

2. *EUPATORIUM MACULATUM* Linn. Amer. Ac. 4, p. 288; Linn. sp. pl. 1174; Willd. sp. pl. 3 1760; Michx. Flor. 2, p. 99; Pursh fl. 2, p. 515; Decand. Prodr. 5, p. 152, n. 69.

Stems 5-6 feet high, with stem basal or petioles, greenish and purple, with numerous glands and purple lines. The glands on the stem and leaves give out an acrid effluvia in flowering time. There are several varieties in the number of leaves.

2. *EUPATORIUM MACULATUM* L.

With 4 leaves in a whorl.

2. *EUPATORIUM MACULATUM* L.

With 3 leaves in a whorl.

2. *EUPATORIUM MACULATUM*.Var. *β* trifolium* Barratt.

Height 4-5 feet, stem solid, slender; the leaves are thin and stretch longer than the usual form of *E. maculatum*. It is found in the Middletown meadows, near the back of the Connecticut; and in the river we perhaps indebted for many of our *Eupatorium*, and other interesting plants.

3. *EUPATORIUM PURPUREUM* Linn. sp. pl. 1173, et Herb. ejusq; (spec. char. bad, excl. syn.) not *E. purpureum* of Decandolle, Willdenow or Pursh. = *E. verticillatum*, Willd. sp. pl. 3 1760, (et Herb. fol. 1 and 2) fide Gray; Bigelow fl. 2d ed. p. 298, excl. Syn. Michx. 2, p. 99.

Stems solid, 6 feet high, glaucous green, sometimes purple, with a purple band, at the joints about 1 inch broad; leaves in whorls of 3, 4 and 5-nerved above, with a pale pubescence beneath and along the midrib and nerves; length from 3-12 inches, wedge-shaped at the base, including a petiole of 1 or two centes, 4 inches wide, with large serratures. The leaves are thin, soft, and of greater size than any species of *Eupatorium* known to me. On fresh leaves, flowers mostly pale purple, turning to violet.

Roots: Green in dry woods or meadows. The leaves have been not been deeply tinged (light) show species, and that great Decandolle, (lt. v. 1) has named it as a variety of *E. fistulosum*, etc.

3. *EUPATORIUM PURPUREUM*Var. *β* album* Barratt.

Flowers dull white; with 5 leaves in a whorl, large and oblong. Grows in dry woods, and has white on rocky places. Stem solid.

3. *EUPATORIUM PURPUREUM*.Var. *β* album* Barratt.

With 1 flower in a whorl - a tall variety, upper leaves subulate - flowers dull white, as *E. fistulosum* Michx. Grows in dry woods. Stem solid.

3. *EUPATORIUM PURPUREUM*Var. *β* album* Barratt.

With 3 leaves in a whorl, stem tall and slender, upper leaves subulate, Elliott Flor. 2, p. 307, note! sub *E. trifolium*, the last 4 lines! = *E. trifolium*, Darlington Flor. Castrica 2d ed. p. 453!

Stems solid, variable in size, leaves with a sub pubescence beneath, deeply serrate, flowers white or sometimes faint purple. An attention to the number of leaves of the Verticillate *Eupatoria* rather than other characters, has led the older botanists into frequent errors, and has occasioned much perplexity and confusion in systematic works, which requires to be cleared away.

4. *EUPATORIUM TRIFOLIUM* Elliott Flor. 2, p. 306! (in part) Decandolle Prodr. 5, p. 151, n. 67.

Stems solid, somewhat branched and glandular; greenish, with purple dots and lines. Height from 3-10 feet, rather slender species. The upper and last whorls of leaves small and fairly serrate. There is a variety of *E. trifolium*, with smooth purple stem, which is sometimes regularly leaved species. It has mostly 3 leaves in a whorl.

4. *EUPATORIUM TRIFOLIUM*Var. *β* vasculosum* Barratt.

Height 2-3 feet; stem solid, acute purple; in meadows and pasture abundant - Stratford Hill west part of Middletown. This handsome variety bears a profusion of purple flowers with a large branched and spreading corymb, (in the first plants) The *E. fistulosum* Pursh, B.C. Pr. 5, p. 153, (end Syn.) may perhaps prove a small variety of our plant? The leaves are strongly reticulated. The upper surface presents a smooth, appressed, in a remarkable degree, but which is mostly effaced in the hard pressed dried specimens.

FIG. 1. Barratt's 1841 publication, titled *Eupatoria verticillata*.

the genus *Salix*. Although Barratt declined this offer, he did provide Hooker a synopsis of this genus. Based on Barratt's synopsis, Hooker described two sections and few taxa in *Salix*, and attributed the new names to Barratt, but the correct authority for these *Salix* taxa is Barratt ex Hook (cf. Weatherby; Argus 1986). Probably this situation might have led a few taxonomists to believe that the correct authority for *Eupatorium fistulosum* is Barratt ex Hook. We speculate that taxonomists who attributed the name *Eupatorium fistulosum* either to Barratt ex Hook. or to Barratt ex Wood, might not have seen Barratt's single folio page publication or might have considered that publication as ineffective.

From Barratt's single folio page publication, it is evident that he validly described a new species, and from Wood (1847), Jackson (1881), and B. Robinson's (1931) references, we believe that Barratt's name was effectively published. Hence, the correct authority for *Eupatorium fistulosum* is Barratt. The authors thank Hunt Botanical Institute Library, Barney Lipscomb (Editor, Sida), Hollis G. Bedell (The Botany Libraries, Harvard University) for providing relevant literature for this study; and Larry E. Brown (Houston Community College), William R. Anderson (University of Michigan Herbarium) and Martin Cheek (Royal Botanic Gardens, Kew) for helpful suggestions. — *Kancheepuram N. Gandhi, Dept. of Biology, University of North Carolina, Chapel Hill, NC 27599-3280 and Paul A. Fryxell, U. S. D. A. Research Botanist in collaboration with Texas A&M University, College Station, TX 77843.*

REFERENCES

- ARGUS, G. W. 1986. The genus *Salix* (Salicaceae) in the southeastern United States. Syst. Bot. Monogr. 9:1–170.
- BARRATT, J. 1841. *Eupatoria verticillata*; specimens to illustrate the North American verticillate species and varieties of the genus *Eupatorium*: with synonyms and references. 1 folio page.
- CORRELL, D. S. and M. C. JOHNSTON. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner.
- CRONQUIST, A. 1980. Vascular flora of the southeastern United States - Asteraceae. Univ. North Carolina Press, Chapel Hill.
- DEAM, C. C. 1940. Flora of Indiana. Dept. of Conservation, Divn. of Forestry, Indianapolis.
- FERNALD, M. L. 1950. Gray's Manual of Botany, 8th ed. American Book Company, New York.
- GLEASON, H. A. and A. CRONQUIST. 1963. Manual of vascular Plants of northeastern United States and adjacent Canada. D. Van Nostrand Company Inc., Princeton, N. J.
- GREUTER, W., Chairman, editorial committee. 1988. International code of botanical nomenclature, adopted by the Fourteenth International Botanical Congress, Berlin, Germany, Jul-Aug 1987. Reg. Veg. 118:1–328.

- JACKSON, B. D. 1881. Guide to the literature of botany. Longmans, Green & Co., London.
- JONES, G. N. and G. D. FULLER. 1955. Vascular plants of Illinois. The University of Illinois Press, Urbana.
- KARTESZ, J. T. 1990. A synonymized checklist of the vascular flora of the United States, Canada, & Greenland, 2nd ed. In Press.
- KING, R. M. and H. ROBINSON. 1970. Studies in Eupatorieae (Compositae). XXI. A new genus, *Neomirandea*. *Phytologia* 19:305–310.
- . 1970. Studies in Eupatorieae (Compositae). XXV. A new genus, *Eupatoriadelphus*. *Phytologia* 19:431–432.
- LONG, R. W. and O. LAKELA. 1971. Flora of tropical Florida. University of Miami Press, Coral Gables, FL.
- MACKENZIE, K. K. 1920. Scientific names applicable to our purple-flowered eupatoriums. *Rhodora* 22:157–165.
- RADFORD, H. E. AHLES, and C. R. BELL. 1968. Manual of the vascular flora of Carolinas. University of North Carolina, Chapel Hill.
- ROBINSON, B. L. 1904. Diagnoses and synonyms of some Mexican and Central American eupatoriums. *Proc. Boston Soc. Nat. Hist.* 31:247–254.
- . 1931. Records preliminary to a general treatment of the Eupatorieae. *Contr. Gray Herb. Harvard Univ.* 96:3–27.
- SOIL CONSERVATION SERVICE. 1982. National list of scientific plant names, vols. 1 & 2. USDA-SCS, Govt. Printing Office, Washington DC.
- STEYERMARK, J. A. 1963. Flora of Missouri. The Iowa State University Press, Ames, IA.
- STRAUSBAUGH, P. D. and E. L. CORE. 1978. Flora of West Virginia, 2nd ed. Seneca Books, Inc., Grantsville, WV.
- WEATHERBY, C. A. 1921. Old time Connecticut botanists and their herbaria-II. *Rhodora* 23:171–177.
- WOOD, A. 1847. A class-book of botany, ed. 2. Crocker & Brewster Publishers, Boston.
- WIEGAND, K. M. and C. A. WEATHERBY. 1937. The nomenclature of the verticillate eupatoria. *Rhodora* 39:297–306.
- WUNDERLIN, R. P. 1982. Guide to the vascular plants of central Florida. University Presses of Florida, Gainesville.

CORRECT NAMES FOR THE VARIETIES OF *CAREX ALBICANS* / *C. EMMONSII* — Rettig (Sida 13:449–452. 1989) reduced *Carex artitecta* Mackenzie and *C. physorhyncha* Steudel to varieties of *C. emmonsii* Dewey ex Torrey. In doing so, I stated that the oldest specific epithet, *C. albicans* Willd. ex. Sprengel, should not be used under article 69.1 of the ICBN (Greuter et al., eds. International Code of Botanical Nomenclature. 1988). It has been pointed out, however, that the name may not have been used “widely and persistently” enough to warrant rejection. Regardless, unless a formal proposal to reject the name *C. albicans* is approved by the Committee for Spermatophyta and the Botanical Congress, the correct names for the three varieties are: